

ABSTRACT OF DISCLOSURE

A multiprotocol label switching device with a distributed forward engine, in which inputted traffic is transferred to its destination by passing once via a switch.

5 Thereby, waste of switch resources is prevented and improved performance of the device is achieved providing stable operation. The multiprotocol label switching device comprises: an interface module in which forward engines for packet input/output are distributed and installed; a controller for allocating VPIs between the forward engines, storing/managing the information on the VPIs; and a switch for switching a packet

10 between the forward engines within the device. The controller allocates the VPIs to the forward engines according to an expression: $VPI\ number = (self\ forward\ engine\ number + relative\ forward\ engine\ number) \% total\ number\ of\ the\ forward\ engines$. The controller generates, stores, extracts or deletes internal connection information based on the VPI information. In addition, the controller transfers the internal connection information to

15 the forward engine. The forward engine changes the internal connection information according to the received internal connection information and performs connection operation.